DIAGNOSIS OF HEAD INJURIES

The diagnosis of head injury, with or without skull fracture, when manifested by the usual signs and symptoms, is not difficult. Roentgenograms are of assistance, although commonly are not helpful in the diagnosis of basal skull fracture. However, embarrassing tardiness in diagnosis frequently occurs.

In sober adults, with the history of severe injury to the head, with loss of consciousness, escape of blood, cerebrospinal fluid or brain matter through the cranial apertures, localizing signs of intracranial trauma or disturbance in hydrostatic pressure, etc., a diagnosis of cerebral damage is readily made. In alcoholics, epileptics, and children, however, the possibility is occasionally overlooked.

Skull fracture occurs more frequently in children than is commonly diagnosed. Basal skull fractures are apt to be overlooked in the group composed of intoxicated individuals. The orbital plates, lowermost portions of the middle and posterior fossae, sphenoidal cells, and the walls of the ethmoids are easily susceptible to fracture.

The history of the patient suffering from alcoholism may be as follows: He falls, or is otherwise injured, while intoxicated. He comes to the physician—frequently with a police escort if he be seen at an emergency hospital—or is visited at home. External evidence of trauma may be slight. There may be a hematoma, abrasion or other minor scalp lesion, a supra-orbital wound or, at times, no outward sign of injury whatsoever. The history and psychic response of the patient are of no value. Other injuries may or may not be present. The wound is treated and the patient discharged, observed until sobriety returns, or instructed to report to the physician's office the following day. After twenty-four to forty-eight hours, or later, unmistakable evidence of intracranial pathologic changes occur—cerebral edema, meningitis, subdural or extradural hemorrhage, etc.

This difficulty in diagnosis is likewise met in other injuries to alcoholic persons. It obtains not infrequently in rupture of the urinary bladder and less often to other intra-abdominal traumata. The patient under the influence of alcohol is, so to speak, narcotized or incompletely anesthetized. He may be euphoric and have a sense of well-being when severely injured.

In head injuries, with cerebral functions already disturbed by alcohol, subjective symptoms cannot be interpreted. Further, drunken persons are so frequently subjected to more or less minor injuries that the tendency in diagnosis is to minimize.

The diagnosis of head injury cannot always be made with certainty at the original observation, after even the most complete examination, and is, therefore, occasionally difficult until complications appear. Since the situation arises with almost monotonous regularity at the inquests of coroners in every large city, a warning seems timely.

490 Post Street.

WALTER BIRNBAUM,
San Francisco.

DIAGNOSTIC POINTS IN PELVIC DISEASE

The immediate treatment of acute lower abdominal conditions, in particular those of the pelvis, is still in controversy, although it would seem that we have enough reliable data to warrant better agreement.

Diagnosis may be justifiably in doubt, and symptoms may seem urgent; yet pain, fever, leukocytosis, and even masses, do not always demand immediate operation. When in doubt a good rule, with not too many exceptions, is to treat with emergency surgery those cases with slow erethrosedimentation, and conservatively those with rapid rates.

Acute appendicitis, twisted pedicle cysts, and disrupted tubal pregnancies are, during their emergency stages, attended with relatively slow sedimentation rates, usually over thirty-five minutes, and all agree that surgery should not be delayed. Such conditions when neglected may, and often do, develop more rapid rates.

One hundred patients, operated upon for acute appendicitis, were studied at the Alameda County Hospital. Their sedimentation times were determined as follows:

Simple acute appendicitis, fifty-four cases: 28 were over 120 minutes; 14, between 60 and 120 minutes; 6, between 40 and 60 minutes; 5, between 25 and 40 minutes; 1 was 21 minutes.

Gangrenous appendicitis, twenty cases: 7 were over 120 minutes; 5, between 60 and 120 minutes; 2, between 40 and 60 minutes; 4, between 25 and 40 minutes; 2, below 25 minutes.

Abscessed and ruptured, twenty-six cases: 5 were over 120 minutes; 5, between 60 and 120 minutes; 7, between 40 and 60 minutes; 5, between 25 and 40 minutes; 4, below 25 minutes.

Seven, it is seen, had rapid sedimentations comparable with those found in acute pelvic inflammatory disease; and of these, six are found in the second and third groups which comprise the advanced or neglected cases. About 7 per cent, then, of appendicitis cases may be expected to have rapid rates, as against well over 90 per cent for the tube infections. So when this differential diagnosis is in question, the test may be the deciding factor.

There were eighty-eight tubal pregnancy patients in the same hospital, upon whom sedimentation tests were recorded: 32 were over 60 minutes; 11, between 50 and 60 minutes; 18, between 35 and 50 minutes; 27, less than 35 minutes.

Seventy-five minutes is the average time in ectopics *at the outset of symptoms.*

The twenty-seven rapid ones need explanation. Three were operated upon three, four, and five days after symptoms began, but the other twenty-four were not treated surgically till ten to forty days had elapsed. Delay in hospitalization of over 30 per cent of these patients shows the difficulty in home diagnosis under present conditions. Evidently competent consultation and more laboratory determinations are necessary.

Of the laboratory tests the blood sedimentation time is entitled to more consideration than it now